

1 **In the Claims**

2 Claims 1 and 26 are currently amended.

3 Claims 10-25, 27-30, and 39-64 are canceled.

4 Claims 1-10, 26, and 31-38 remain in the application for consideration and
5 are listed as follows:

6
7 1. (Currently Amended) A method for use in encoding video data, the
8 method comprising:

9 within a sequence of video pictures, selecting a current video picture to be
10 encoded;

11 dividing the current video picture into portions and selecting a current
12 portion to be encoded;

13 establishing at least a first reference picture for said current portion; and
14 selectively assigning at least one motion vector predictor (MVP) to said current
15 portion, said MVP including data associated with at least said first reference
16 picture and with at least one other encoded portion of said current video picture,
17 and wherein said MVP is not based on a temporal interpolation of motion vectors
18 used for encoding said first reference picture, and wherein selectively assigning
19 said MVP to said current portion further includes:

20 encoding said current portion using a Copy Mode scheme based on a
21 spatial prediction technique to produce a Copy Mode coded current portion;

22 encoding said current portion using a Direct Mode scheme based on
23 a temporal prediction technique to produce a Direct Mode coded current
24 portion; and

1 selecting between said Copy Mode coded current portion and said
2 Direct Mode coded current portion, wherein selecting between said Copy
3 Mode coded current portion and said Direct Mode coded current portion is
4 accomplished using a Rate Distortion Optimization (RDO) technique,
5 wherein said RDO technique uses a Lagrangian parameter λ based on a
6 quantizer (QP) associated with said current portion, and wherein said RDO
7 technique employs an adaptive weighting function, wherein said adaptive
8 weighting function includes:

$$f(QP) = \max\left(2, \min\left(4, \frac{QP}{6}\right)\right).$$

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12 2. (Original) The method as recited in Claim 1, further comprising:
13 establishing at least a second reference picture for said current portion; and
14 wherein said MVP further includes data associated with said second
15 reference picture, and said MVP is not based on a temporal interpolation of motion
16 vectors used for encoding said second reference picture.

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18 3. (Original) The method as recited in Claim 1, wherein said first
19 reference picture either temporally precedes or temporally follows said current
20 video picture in said sequence of video pictures.

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22 4. (Original) The method as recited in Claim 2, wherein said second
23 reference picture either temporally precedes or temporally follows said current
24 video picture in said sequence of video pictures.

1 5. (Original) The method as recited in Claim 2, wherein said first and
2 second reference picture both either temporally precede or temporally follow said
3 current video picture in said sequence of video pictures.

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5 6. (Original) The method as recited in Claim 2, wherein said first
6 reference picture either temporally precedes or temporally follows said second
7 reference picture in said sequence of video pictures.

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9 7. (Original) The method as recited in Claim 2, wherein said second
10 reference picture either temporally precedes or temporally follows said first
11 reference picture in said sequence of video pictures.

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13 8. (Original) The method as recited in Claim 1, wherein said sequence
14 of video pictures includes interlaced pictures.

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16 9. (Original) The method as recited in Claim 1, wherein said at least
17 one other encoded portion of said current video picture is a spatially neighboring
18 portion within said current video picture.

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20 10 - 25. (Canceled).

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22 26. (Currently Amended) The method as recited in Claim ~~26~~1, wherein
23 selecting between said Copy Mode coded current portion and said Direct Mode
24 coded current portion is accomplished at least in-part based on user input.

1 27. – 30. (Canceled).

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3 31. (Original) The method as recited in Claim 1, wherein said current
4 portion is selected from a group of different types of portions comprising a picture,
5 a block, a macroblock, a subblock, a sub-partition, a slice.

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7 32. (Original) The method as recited in Claim 1, wherein said current
8 picture is encoded as at least one picture selected from a group of pictures
9 comprising a B picture and a P picture.

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11 33. (Original) The method as recited in Claim 2, wherein said first and
12 second reference pictures are each encoded as P pictures or B pictures.

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14 34. (Original) The method as recited in Claim 1, wherein a syntax
15 associated with said current picture identifies that said current picture was encoded
16 using said MVP.

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18 35. (Original) The method as recited in Claim 1, wherein a syntax
19 associated with said current picture includes at least one parameter selected from a
20 group of parameters comprising a copy_mv_spatial parameter, a direct_mv_spatial
21 parameter, and a direct_mv_scale_div_diff.

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23 36. (Original) The method as recited in Claim 34, wherein said syntax
24 includes a header selected from among a group of headers comprising a frame
25 header, a macroblock header and a slice header.

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2 37. (Original) The method as recited in Claim 36, wherein said syntax
3 includes at least one flag indicative of a type of direct mode encoding used.
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5 38. (Original) The method as recited in Claim 36, wherein said type of
6 direct mode encoding used is selected from a group comprising temporal direct
7 mode and spatial direct mode.
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9 39. – 64. (Canceled).
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